

ABSTRACT OF THE DISCLOSURE

A second gear rotating at a rotation speed faster than a rotation speed of a first gear while meshing therewith, a magnet provided on the second gear and rotating together therewith, and a small angle detection magnetic sensor disposed in a vicinity of where the second gear is fixed and configured to detect a magnetic line of force of the magnet are provided. Meanwhile, a third gear rotating at a rotation speed slower than the rotation speed of the second gear in synchronization with the first gear, a magnet provided on the third gear and rotating together therewith, and a large angle detection magnetic sensor disposed in a vicinity of where the third gear is fixed and configured to detect a magnetic line of force of the magnet are provided. A rotation angle of a steering shaft is calculated based on angle data detected in the small angle detection magnetic sensor and the large angle detection magnetic sensor.